

ST Series – Part Numbering



Features

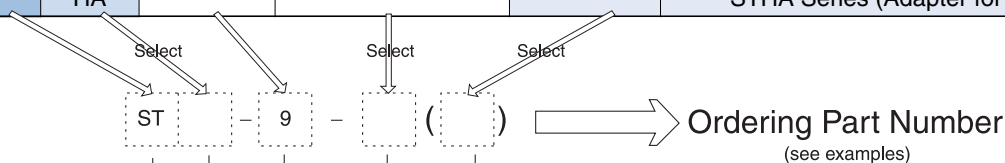
- Super-miniature size with multiple contact
- Safe insert system preventing pin damage

Applications

- Professional A/V
- Measuring equipment
- Sensors
- Wireless radio
- Medical

Part Numbering

Part Number		Size	Number of Contacts	Suffix	Notes	Page
Series	Prefix					
ST	H	8 or 8B	14	P	Main ST series Plug	73,74
				R/RPCB	ST Receptacle	73
				RGPCB	ST Receptacle (PCB termination with ground pin)	74
				P	STH Series Plug	73,74
				R/RPCB	STH Receptacle	73
				RGPCB	ST Receptacle (PCB termination with ground pin)	74
	A HA	9	12,16,20	P	Main ST series Plug	76
				PLM1	Molding Type ST Plug	76
				R/RPCB	ST Receptacle	76
				P	STH Series Plug	77
				PLM1	Molding Type STH Plug	77
				R/RPCB	STH Receptacle	77
					STA Series (Adapter for ST series)	76
					STHA Series (Adapter for STH series)	77



Connector Series

ST series
 STH - reverse contact
 STA - adapter for ST series
 STHA - adapter for STH series

Size

8,8B,9

No. of Contacts

12,16,20

Shell Type

P : Plug
 R : Receptacle (solder termination)
 RPCB : Receptacle (PCB termination)
 RGPCB : Receptacle (PCB termination with grounding pin)
 PLM1 : Plug (Molding type)
 blank : Adapter

Examples

ST - 9 - 12 (P)

ST series - Size 9 - 12 contact (Plug)

ST - 9 - 16 (R)

ST series - Size 9 - 16 contact (Receptacle/Solder contact termination)

ST - 9 - 16 (RPCB)

ST series - Size 9 - 16 contact (Receptacle / PCB contact termination)

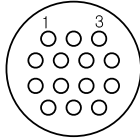
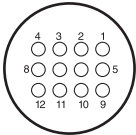
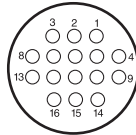
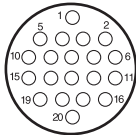
STA - 9 - 20

Adapter for ST series - Size 9 - 20 contact

STHA - 9 - 20

Adapter for STH series - Size 9 - 20 contact

Major Performances / Contact Arrangements

Size / No. of Contacts		Size 8		
Performance		14		
Withstanding Voltage (per min)		AC 300V		
Current		1A		
Insulation Resistance (Minimum)		1,000M Ω		
Contact Resistance (Maximum)		30m Ω		
Solder Pot Inside Diameter		\varnothing 0.5		
Contact Arrangement				
Size / No. of Contacts		Size 9		
Performance		12	16	20
Withstanding Voltage (per min) ¹		AC 300V	AC 300V	AC 300V
Current		1A	1A	1A
Insulation Resistance (Minimum) ²		1,000M Ω	1,000M Ω	1,000M Ω
Contact Resistance (Maximum) ³		30m Ω	30m Ω	30m Ω
Solder Pot Inside Diameter		\varnothing 0.5	\varnothing 0.5	\varnothing 0.5
Contact Arrangement				

- ! ¹ Withstanding voltage is the tested voltage value in this table.
² Insulation resistance is measured at DC 100V.
³ Contact resistance is measured at DC 1A.
 • Values are from tested items and may not apply to all connectors.
 • Specifications subject to change without notice.
 • Consult Sam Woo Electronics for the latest specifications.

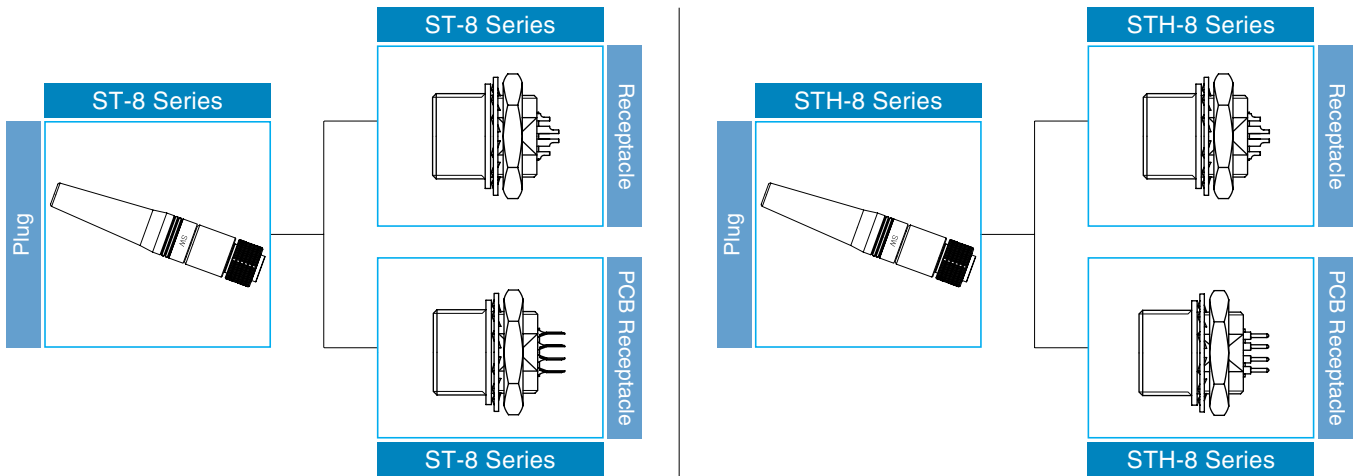
Material Used / Finish

		Material	Finish
Body		Brass & Zinc alloy	Ni Plating
Insulator		PPS resin	Black
Contacts	Pin	Phosphor bronze and Beryllium	Gold Plating
	Socket	Phosphor bronze	Gold Plating

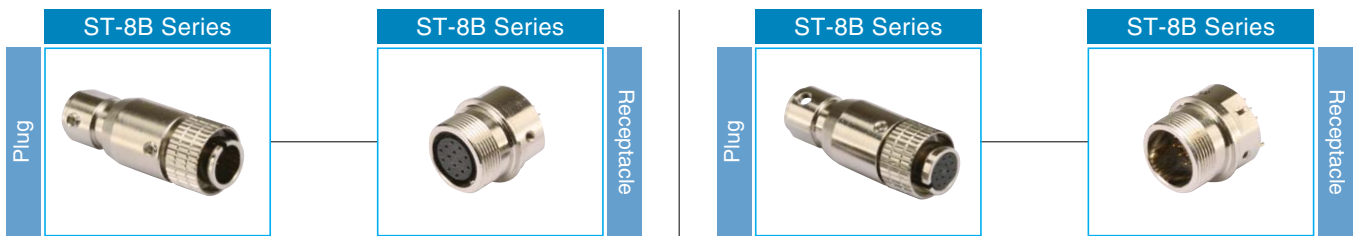
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

ST Series - mini-map

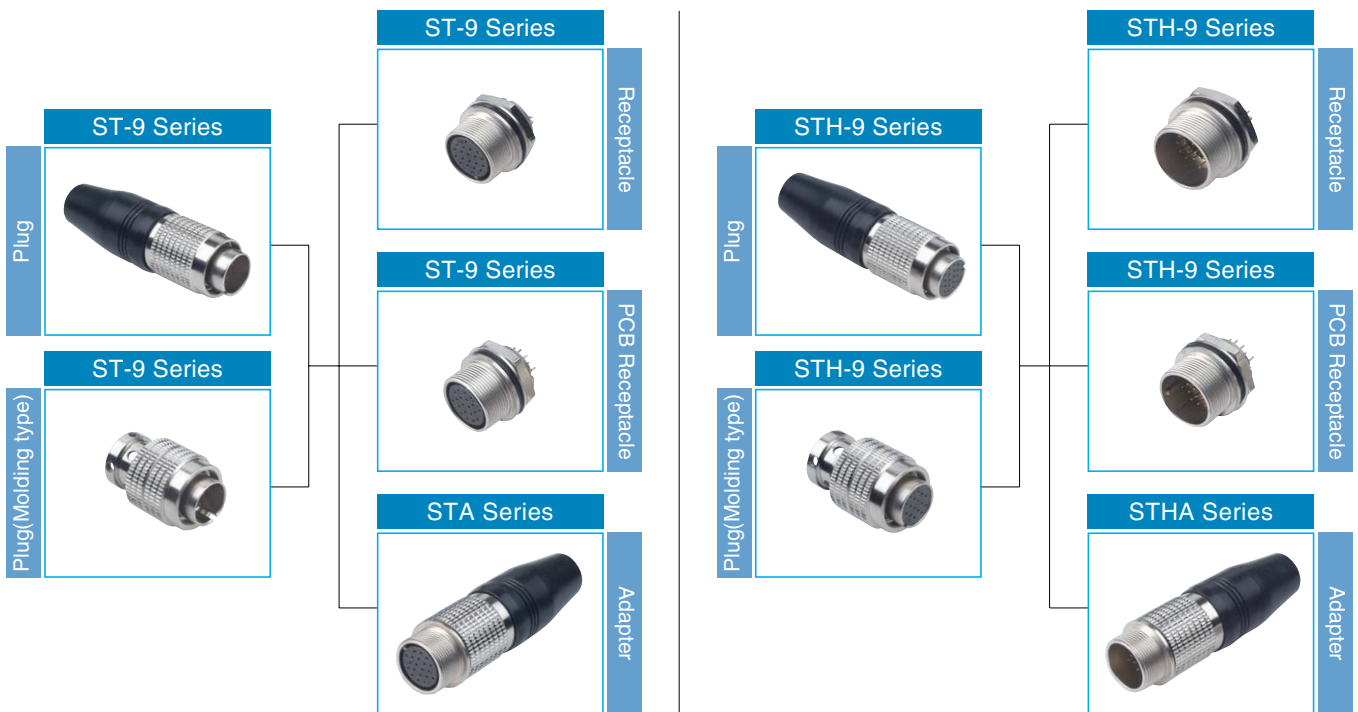
ST-8 Series



ST-8B Series



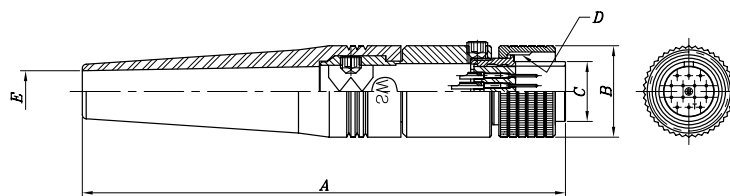
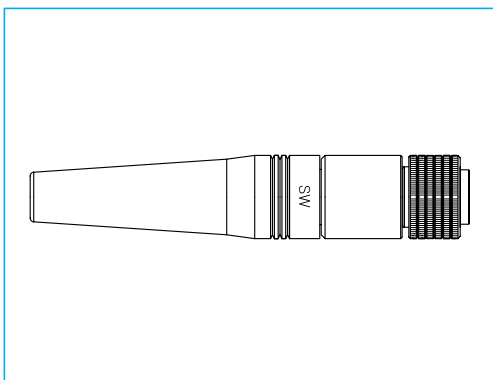
ST-9 Series



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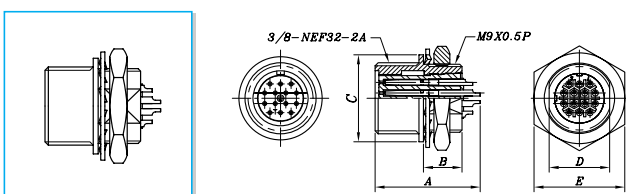
Plug, Receptacle – ST-8 Series

ST-8 Plug



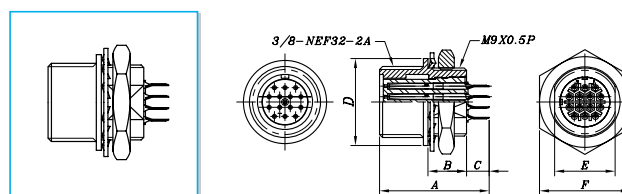
Part Number	A	B	C	D	E
ST-8-14(P)	58	11	7.2	3/8-32NEF-2B	5

ST-8 solder Type Receptacle



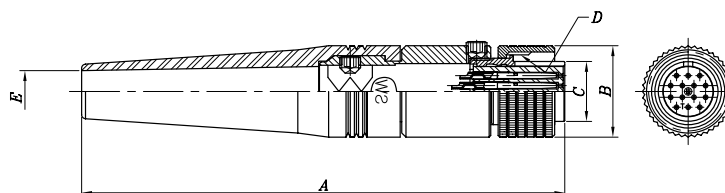
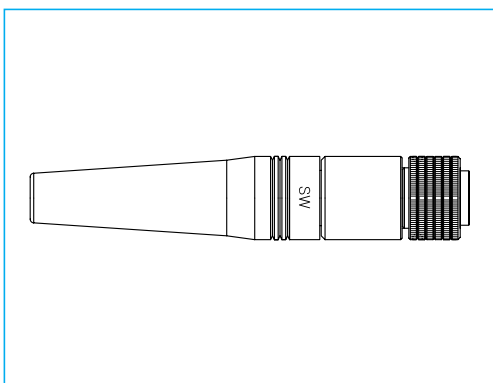
Part Number	A	B	C	D	E
ST-8-14(R)	13.9	5.1	11.5	8	12

ST-8 PCB Type Receptacle



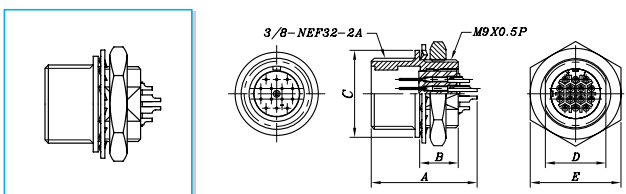
Part Number	A	B	C	D	E	F
ST-8-14(RPCB)	14.5	5.1	3	11.5	8	12

STH-8 Plug



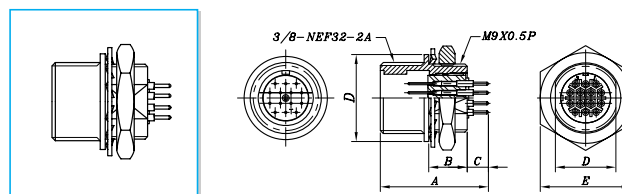
Part Number	A	B	C	D	E
STH-8-14(P)	58	11	7.2	3/8-32NEF-2B	5

STH-8 solder Type Receptacle



Part Number	A	B	C	D	E
STH-8-14(R)	14	5.1	11.5	8	12

STH-8 PCB Type Receptacle

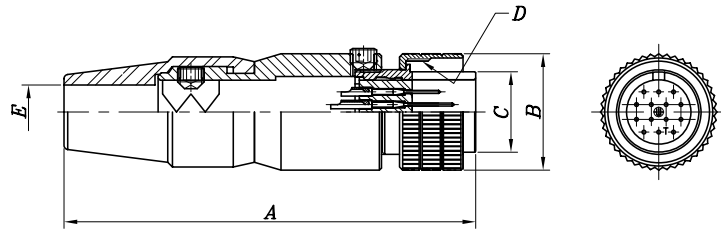


Part Number	A	B	C	D	E	F
STH-8-14(RPCB)	14.3	5.1	2.8	11.5	8	12

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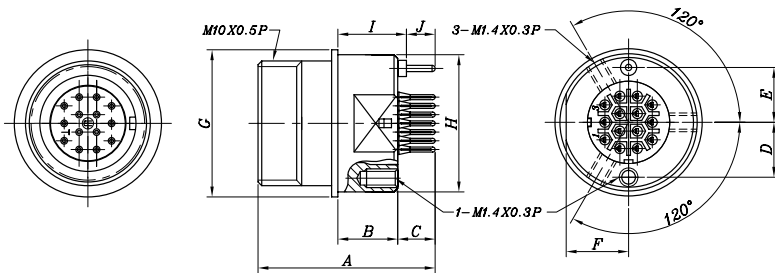
ST-8B Series – Plug, Receptacle

ST-8B Plug



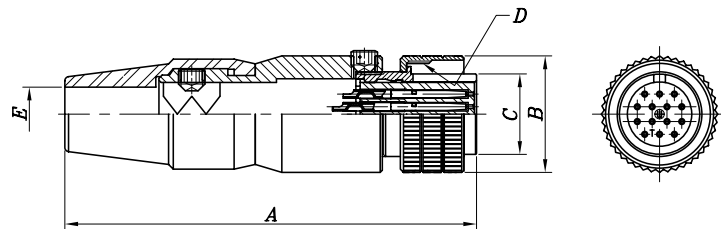
Part Number	A	B	C	D	E
ST-8B-14(P)	38.9	11	7.6	M14×1.0P	5.1

ST-8B Receptacle



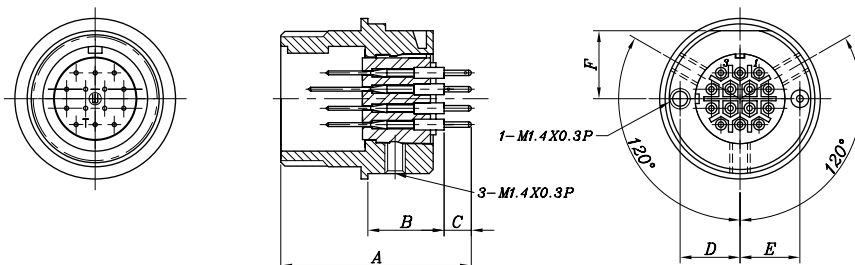
Part Number	A	B	C	D	E	F	G	H	I	J
ST-8B-14(RGPCB)	14.2	4.8	3	4.4	4.4	5	11.8	10.95	5.5	2.3

STH-8B Plug



Part Number	A	B	C	D	E
STH-8B-14(P)	38.9	11	7.6	M14×1.0P	5.1

STH-8B Receptacle



Part Number	A	B	C	D	E	F	G	H	I	J
STH-8B-14(RGPCB)	14.2	4.8	3	4.4	4.4	5	11.8	10.95	5.5	2.3

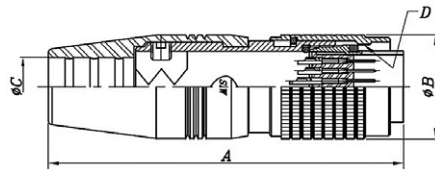
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

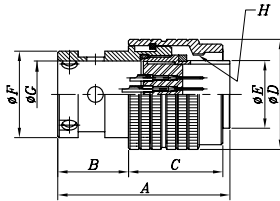
ST-9 Series – ST Plug, Receptacle, Adapter

ST-9 Plug



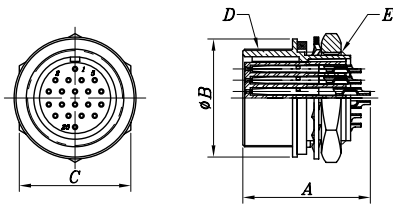
Part Number	A	ØB	ØC	D
ST-9-12(P)	43.0	12.5	7.0	M10.5×0.5P
ST-9-16(P)				
ST-9-20(P)				

ST-9 Molding Type Plug



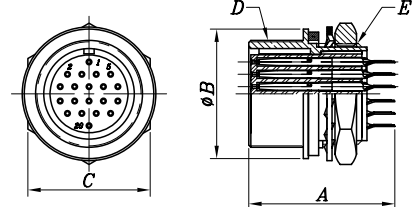
Part Number	A	B	C	ØD	ØE	ØF	ØG	H
ST-9-12(PLM1)	22	9	12	14	12.8	11	8.5	M10.5×0.5P
ST-9-16(PLM1)								
ST-9-20(PLM1)								

ST-9 Solder Type Receptacle



Part Number	A	ØB	C	D	E
ST-9-12(R)	13.6	12.6	12.0	M10.5×0.5P	M10×0.75P
ST-9-16(R)					
ST-9-20(R)					

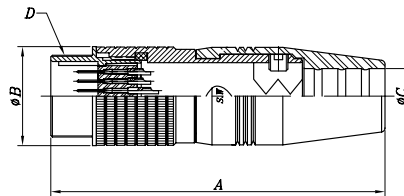
ST-9 PCB Type Receptacle



Part Number	A	ØB	C	D	E
ST-9-12(RPCB)	14.1	12.6	12.0	M10.5×0.5P	M10×0.75P
ST-9-16(RPCB)					
ST-9-20(RPCB)					

STA-9 Adapter

Part Number	A	ØB	ØC	D
STA-9-12	42.6	12.6	7.0	M10.5×0.5P
STA-9-16				
STA-9-20				

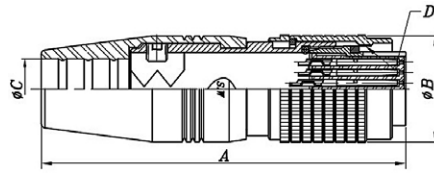


Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

STH Plug, Receptacle, Adapter – ST-9 Series

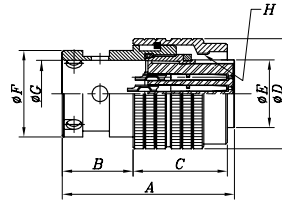
STH-9 Plug

Part Number	A	ØB	ØC	D
STH-9-12(P)	43.0	12.5	7.0	M10.5×0.5P
STH-9-16(P)				
STH-9-20(P)				

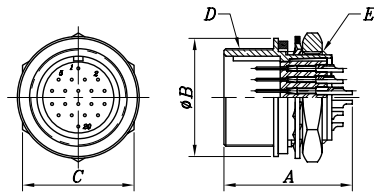


STH-9 Molding Type Plug

Part Number	A	B	C	ØD	ØE	ØF	ØG	H
STH-9-12(PLM1)	22	9	12	14	12.8	11	8.5	M10.5×0.5P
STH-9-16(PLM1)								
STH-9-20(PLM1)								

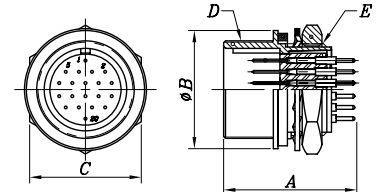


STH-9 Solder Type Receptacle



Part Number	A	ØB	C	D	E
STH-9-12(R)	13.6	12.6	12.0	M10.5×0.5P	M10×0.75P
STH-9-16(R)					
STH-9-20(R)					

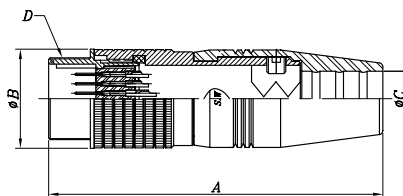
STH-9 PCB Type Receptacle



Part Number	A	ØB	C	D	E
STH-9-12(RPCB)	14.1	12.6	12.0	M10.5×0.5P	M10×0.75P
STH-9-16(RPCB)					
STH-9-20(RPCB)					



STHA-9 Adapter



Part Number	A	ØB	ØC	D
STHA-9-12	42.6	12.6	7.0	M10.5×0.5P
STHA-9-16				
STHA-9-20				

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

ST Series – Cable Assembly Instruction

General Instruction / Information

- Diagram 1 shows a sample wiring for ST series.
- Soldering must be done quickly and carefully to prevent damage to insulator.
- Receptacles do not require additional instructions.

Wiring Sequence

- ① Select cable according to outer diameter and cross section, lower than 0.129mm²(AWG#28).
- ② Insert RUBBER BUSHING to cable.
- ③ Insert PLUG HOUSING to cable.
- ④ Strip cable per dimension given and loosen braid.
- ⑤ Secure PLUG BODY to jig for soldering.
- ⑥ Solder stripped cable to pin.
- ⑦ Fasten CRIMP using hand crimp tool (SA-HCT^①)
- ⑧ Lock PLUG HOUSING and PLUG BODY using tightening force displayed on Table 1.
- ⑨ Tighten WRENCH BOLT using 0.3N force onto one of two embossed parts of crimp.
- ⑩ Cover RUBBER BUSHING onto PLUG HOUSING.

^① See below for information on SA-HCT.

Diagram 1

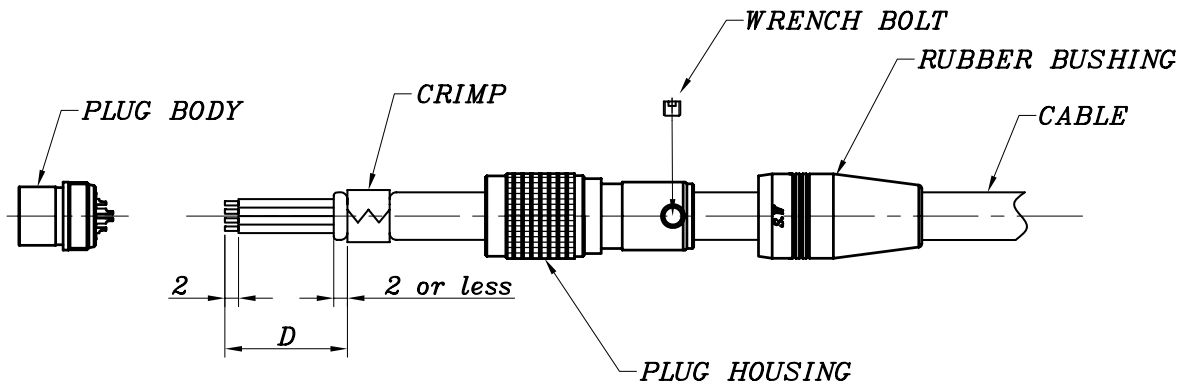


Table 1

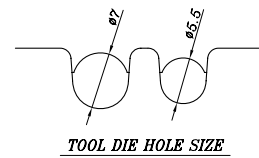
unit : mm

Size	Spanner Jaw	D (Dimension)	Tightening Force	Notes
ST	8	10	1.0N · m (10kg · cm)	SA-HCT size Ø7.0

SA-HCT (Hand Crimp Tool)



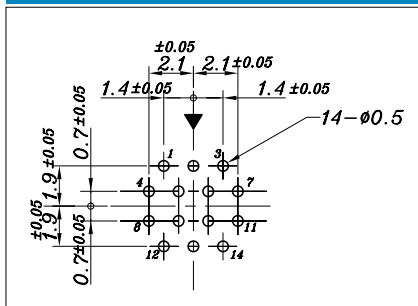
Specially designed for Sam Woo's connector, the low-cost and efficient SA-HCT provides the best crimping results.



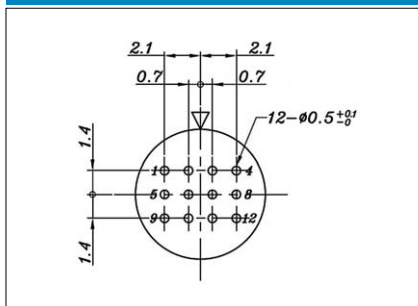
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

ST Receptacle PCB Hole Layout

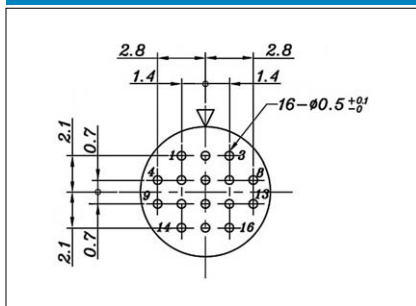
8 size - 14 core



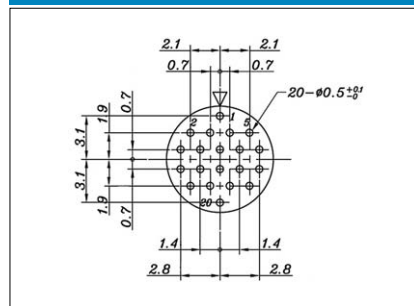
9 size - 12 core



9 size - 16 core

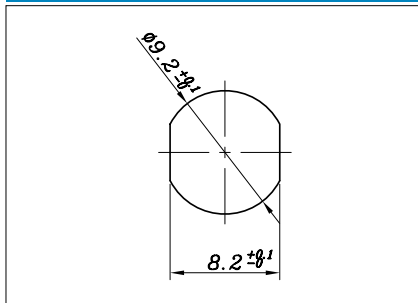


9 size - 20 core

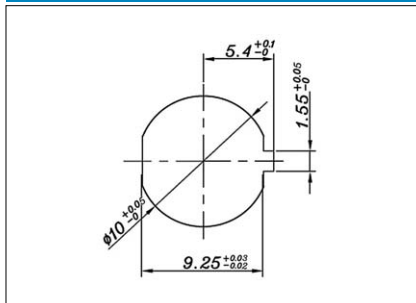


ST Receptacle Panel Layout

8 size receptacle



9 size receptacle



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